- Wednesday, 13 March 2013
- 2 (10.00 am)
- 3 (Proceedings delayed)
- 4 (10.30 am)
- 5 THE CORONER: Yes, good morning.
- 6 MR MAXWELL-SCOTT: Good morning, madam. Thank you for
- 7 giving us some time to have discussions this morning.
- 8 The focus of those discussions has been whether there is
- 9 a need and whether it would be appropriate for Mr Martin
- 10 to be asked to give any evidence that touches upon the
- 11 issues raised in the submission of Mr Hendy and
- 12 Mr Edwards on the London Building Act's Amendment Act
- 13 1939.
- 14 THE CORONER: Yes.
- 15 MR MAXWELL-SCOTT: Having had those discussions, my proposal
- 16 would be that we proceed with Mr Martin's evidence today
- 17 on the matters which he expected to be asked to give
- 18 evidence on, in other words those addressed in his
- 19 statement relating primarily to interpretation of
- 20 Approved Document B, and that he not be asked any
- 21 questions that relate to the points raised in the
- 22 submission of Mr Hendy and Mr Edwards.
- I understand that he will be able to assist DCLG and
- 24 their legal team behind the scenes to respond in
- 25 whatever way seems most appropriate to those legal

- submissions, and if absolutely necessary he could attend
- 2 at the beginning of next week to give any factual
- 3 evidence which was deemed appropriate, or indeed expert
- 4 evidence if deemed appropriate, but it may well be that
- 5 the need for that will fall away, or it may well that be
- 6 that the position is reached that it's actually a matter
- 7 of pure law on which it would be inappropriate to hear
- 8 evidence.
- 9 So pragmatically my proposal would be that we
- 10 proceed with his evidence today on the issues that he
- 11 was asked to address and expected to be called to deal
- 12 with.
- 13 THE CORONER: Yes. What factual matters might there need to
- 14 be explored?
- 15 MR MAXWELL-SCOTT: There is, as I understand it, a question
- about whether the balconies constitute enclosures, which
- 17 I believe is a matter that's not strictly defined in the
- 18 relevant legislation, and so arguably might be a matter
- on which evidence could be heard or could be admissible.
- 20 THE CORONER: Okay. All right, well that's helpful.
- 21 MR MAXWELL-SCOTT: Others may be better placed to clarify
- that in more detail.
- 23 THE CORONER: Yes.
- 24 MR MAXWELL-SCOTT: But I would not recommend putting off his
- 25 evidence in its entirety to see where it's going to go

- on that particular issue.
- 2 THE CORONER: I should be very reluctant to do that. Yes,
- 3 thank you. Mr Hendy?

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seen.

- 4 MR HENDY: Madam, it seems that my team have been the
- 5 instigator of the delay and the discussion, so could
- I just explain the position. First of all, let me just
- 7 say that we are more than happy that Mr Martin shouldn't
- 8 be asked factual questions today and simply confine his
- 9 evidence to the Building Regulations and Approved
- Document B. Indeed, we go further than that, we don't
- 11 think there are any factual questions that Mr Martin
- would need to come back to deal with.
- 13 The point about whether balconies are enclosures is 14 no part of our submission. Madam, the way this came 15 about is that we were advised that section 20 of the 16 1939 Act was relevant when these buildings were built, and reference has been made to various bylaws and so 17 18 forth. We didn't think that this was a very compelling argument, but at the end of last week, we got copies of 19 20 some of the bylaws, and yesterday Mr Edwards went to the 21 Royal Institute of British Architects (RIBA) in Great 22 Portland Street and managed to get, in their library,

access to a number of documents, as a consequence of

which he's drafted the submission which I think you've

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This morning other parties have most helpfully drawn 1 2 our attention to the possibility of other documents being relevant, and other legal arguments, indeed, being 3 4 needed to be taken on board, and can I say how grateful we are for that information and we will follow up all 6 the suggestions that have been made, and it may be that we can revise the submission, and it may be, at the end 8 of the day, that the submission need never go before 9 you, madam. But we did consider it our duty, once the trail looked as if it might lead somewhere, to pursue 10 it, and that's what we've done. 11

So at the moment we're not troubling you with it, we're certainly not troubling Mr Martin with it, and we're very happy to proceed in the way that

Mr Maxwell-Scott has suggested.

16 THE CORONER: Thank you. I have read your submission but
17 I'm happy to put it on one side for the moment and see
18 where that goes, thank you. Yes.

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Does anyone else want to add anything? No.

All right, well that's very helpful, thank you very much for sorting that out. I should very much like to hear Mr Martin's evidence this morning and the basis on which that's going to be dealt with sounds very sensible to me. We'll deal with other matters -- I think it's going to be appropriate to deal with matters such as

- 1 those raised by Mr Hendy and Mr Edwards by way of legal
- 2 argument, I should be very surprised if it needed
- 3 anything else, and we have to bear in mind the extent to
- 4 which we need to look at this in the context that we
- 5 were' dealing with here.
- 6 All right, does anyone want to raise anything else
- 7 before we begin? Thank you very much.
- 8 Yes, could we ask the jury to come in then, thank
- 9 you.
- 10 MR MAXWELL-SCOTT: Madam, before Mr Martin is called, is
- 11 there's one update to the jury bundle which is to add
- 12 Ms McGahey to the list of advocates.
- 13 THE CORONER: Thank you.
- 14 MR MAXWELL-SCOTT: We have copies here. (Handed)
- 15 (In the presence of the Jury)
- 16 THE CORONER: Members of the jury, good morning. Apologies
- for having kept you waiting this morning. We're going
- 18 to hear evidence this morning from Mr Brian Martin, who
- is with the Department for Communities and Local
- 20 Government.
- 21 I'll come back in a moment to the area that we're
- going to cover with him, but just briefly, the
- 23 department is one of the properly interested persons at
- 24 the Inquests, and counsel, Ms McGahey -- thank you very
- 25 much, Ms McGahey -- is here today, and just so that you

- 1 have a complete picture of all the advocates,
- 2 Mr Maxwell-Scott and Mr Atkins have updated the page in
- 3 your jury bundle. We can give that you page now so you
- 4 can see who is who, but it's simply changed to add
- 5 Ms McGahey to the list of those who are here. Thank you
- 6 very much.
- 7 Members of the jury, you will remember that we had
- 8 evidence from Mr Walker, in fact spread over three days,
- 9 and Mr Walker dealt with fire risk assessments, and we
- 10 also had lengthy debate with Mr Walker about the
- 11 Building Regulations. Mr Martin is going to be dealing
- 12 with Building Regulations. Don't lose heart, you'll
- 13 remember the complexity that we had last time. We'll
- see where we go this morning, but if you do feel
- bewildered or getting a bit lost, please don't lose
- heart because we shall try and help you find a way
- through it when we get to the end.
- 18 Mr Martin, please, would you like to come forward?
- 19 BRIAN MARTIN (sworn)
- 20 THE CORONER: Thank you very much, Mr Martin. Do sit down
- and help yourself to a glass of water.
- 22 A. Thank you.
- 23 THE CORONER: You'll see that the microphones in front of
- you are switched on. You do need, please, to be fairly
- 25 close to the microphones for your voice to be amplified.

- 1 It may help when you're giving your evidence if you give
- 2 your answers across the room towards the members of the
- 3 jury, that will help them to hear your evidence and help
- 4 to keep you close to the microphones.
- 5 A. Okay.
- 6 THE CORONER: Mr Maxwell-Scott, who is standing, will be
- 7 asking questions initially on my behalf and then there
- 8 will be questions from others. Thank you.
- 9 Questions by MR MAXWELL-SCOTT
- 10 MR MAXWELL-SCOTT: Good morning, Mr Martin, can you give the
- 11 court your full name, please?
- 12 A. Brian Martin.
- 13 Q. If we could firstly cover your background and
- 14 qualifications. Is it right that you're currently
- 15 employed by the Department of Communities and Local
- 16 Government --
- 17 A. Yes.
- 18 Q. -- and have been since 2008?
- 19 A. Yeah.
- 20 Q. You are a principal construction professional.
- 21 A. Yes.
- 22 Q. Before you worked for the Department for Communities and
- 23 Local Government, which I'll refer to as DCLG, did you
- 24 work for the Building Research Establishment (BRE) --
- 25 A. That's correct, yes.

- 1 Q. -- the same organisation that Mr Crowder works for now?
- 2 A. Yes.
- 3 Q. For how long did you work for BRE?
- 4 A. It was around about ten years, I think.
- 5 Q. When you worked for BRE, did you have some involvement
- 6 in the preparation of an additional Approved Document B?
- 7 A. Yes, that was a large part of the work that I did at
- 8 BRE.
- 9 Q. Can you just explain to the jury in a little more detail
- 10 what your role was in Approved Document B and when it
- 11 was?
- 12 A. When I -- part of my job at BRE was supporting DCLG's
- officials in handling fire safety policy in relation to
- 14 the Building Regulations. I did a range of different
- 15 tasks there. As the 2006 edition was being prepared,
- 16 I was the project leader that took forward the process
- 17 that brought about that -- that revised approved
- 18 document.
- 19 Q. The version of Approved Document B that the members of
- 20 the jury have looked at up until now is the 2000 edition
- 21 with 2002 amendments. Your role, as I understand it
- from your answer a moment ago, was to lead a team
- 23 preparing the 2006 edition; is that right?
- 24 A. Yes, I was involved to some extent with the previous --
- 25 the introduction of the previous edition, although most

- of the policy decisions had already been made by then,
- 2 so it was more about disseminating the 2000 decision,
- 3 making people understand it, or helping people
- 4 understand the changes that were introduced then through
- 5 seminars and training programmes and so on.
- 6 Q. Is it right that Approved Document B has had further
- 7 amendments to it in 2007 and 2010?
- 8 A. Yes.
- 9 Q. There are further amendments due to come into force this
- 10 year, 2013?
- 11 A. That's right.
- 12 Q. In your work at DCLG, to what extent have you been
- involved in the preparations of what will be the latest
- version when it comes into force later this year?
- 15 A. I'm the official within the department that's
- responsible for delivering those changes, so it's my job
- 17 to gather the information, commission research where
- it's necessary and ultimately advise ministers on the
- 19 course of action that's available to them.
- 20 Q. If I ask you then about your career before you joined
- 21 BRE in 1999, what jobs had you held before that?
- 22 A. I was a Building Control Officer for three different
- local authorities. I worked at the City of Westminster,
- 24 the London Borough of Tower Hamlets and Dartford Borough
- 25 Council. Before that I worked in the construction

- 1 industry. I was a site manager and a tradesman.
- 2 Q. What relevant professional qualifications do you hold?
- 3 A. I'm fellow of the Association of Building Engineers.
- 4 Q. I don't think we've heard that organisation referred to
- 5 before, so can you briefly explain what it is and how
- one becomes a fellow?
- 7 A. I think -- you've heard from several chartered
- 8 surveyors, it's fairly similar. It's an institution
- 9 that mostly has its membership from building control
- 10 surveyors, so people who specialise in the application
- of the Building Regulations.
- 12 Q. Does one need to pass an exam?
- 13 A. Yes, there's a number of different exams you need to
- pass, and there's a test of competence.
- 15 Q. As I think you are aware, one of the features of the
- 16 evidence that we have heard in this case is that no
- 17 formal plans were deposited with Southwark Building
- 18 Control Department in relation to the 2006/2007 works,
- 19 and equally no formal building notice was submitted.
- 20 A. (The witness nodded)
- 21 Q. I see you nodding: you're aware of that?
- 22 A. I am aware of that, yes.
- 23 Q. You're probably also aware that any communication that
- 24 may have taken place between those who worked for SBDS
- 25 and Southwark Building Control has not survived in any

- written documented form.
- 2 A. (The witness nodded)
- 3 Q. I see you nodding.
- 4 A. Yeah, that's -- that's my understanding, I've tried to
- 5 follow the Inquest as much as I was able, that's my
- 6 understanding.
- 7 Q. One of the effects of that is that we have not heard any
- 8 evidence about how a Building Control officer might have
- 9 reacted had formal plans been deposited or a building
- 10 notice submitted, and we haven't heard from anybody who
- 11 worked in building control. In a sense, what we are
- 12 therefore considering is, to some extent, hypothetical
- 13 situations about how a building control department might
- 14 have reacted and how it might have advised or commented
- had the 2006/2007 refurbishments been put to them in
- a formal way; you understand that?
- 17 A. Yes.
- 18 Q. With that introduction out of the way, I wanted to ask
- 19 you who the approved documents are written for, who
- 20 their intended audience is, and if I could ask you
- 21 firstly to look at the edition that was in force at the
- 22 time, and I'll put that up on the screen, I think you
- 23 may have it with you as well.
- I'm looking at page 7, "Use of guidance". We're
- 25 told in the first paragraph on this page that the

- 1 document:
- 2 "... is one of a series that has been approved and
- 3 issued by the Secretary of State for the purpose of
- 4 providing practical guidance with respect to the
- 5 requirements of Schedule 1 to and Regulation 7 of the
- 6 Building Regulations."
- 7 In your view, who is the intended audience of this
- 8 guidance?
- 9 A. It's quite a wide band of people, but they would tend to
- be professionally involved in the construction industry
- in one way or another. So they would be people involved
- in the design of buildings, and also building control
- officers.
- 14 Q. You mentioned there building control officers, that
- obviously makes sense, because if formal applications
- are made to a building control department, they will
- 17 need to use this document to decide how to deal with
- those applications; is that right?
- 19 A. Yes.
- 20 Q. Then you also mentioned design of buildings. Let me ask
- 21 you this: we are considering here, are we not, not just
- 22 the design of new buildings, but also any works that
- 23 might be being done to existing buildings?
- 24 A. Yes, often application of the regulations and the
- 25 guidance to existing buildings is the more challenging

- task, because you're dealing with buildings that may
- 2 have been built even hundreds of years ago, and trying
- 3 to establish what was -- how the regulations apply to
- 4 them does require a degree of skill and expertise.
- 5 Q. So anyone who is carrying out works to an existing
- 6 building and is conscious that they may be introducing
- 7 features that, for example, are less fire-resisting than
- 8 those currently in place, would need to liaise with the
- 9 relevant building control department; is that right?
- 10 A. In the majority of cases. Establishing where the
- 11 Building Regulations are triggered or not is in itself
- 12 sometimes difficult to establish.
- 13 Q. But if in doubt, they would be able to consult
- informally with a building control officer?
- 15 A. Yes, that's quite common that somebody proposing to do
- work, the first thing they will do is contact the
- 17 building control department and ask their advice and
- 18 whether or not an application was required.
- 19 Q. That will trigger the need for consideration of the
- 20 proposed works in the light of Approved Document B.
- 21 A. Yes.
- 22 Q. What I would like to do next is work through with you,
- using Approved Document B, your interpretation of how it
- 24 applied to some features of the works carried out in
- 25 2006/2007 and, in particular, the panels underneath the

- bedroom windows.
- 2 A. Okay.
- 3 Q. I think we should say before we begin that exercise --
- I think it's a point that you importantly wish to
- 5 make -- that neither you nor the Department for
- 6 Communities and Local Government has authority to
- 7 determine questions of law, questions of the correct
- 8 interpretation of the Building Regulations themselves;
- 9 is that right?
- 10 A. That's correct.
- 11 Q. The requirements in many cases will be to comply with
- 12 Schedule 1 of the Building Regulations, and that is
- 13 a matter of law.
- 14 A. Yes.
- 15 Q. But the approved documents, such as Approved Document B
- as we've seen with previous witnesses, are there to
- 17 provide guidance on how to comply with the law --
- 18 A. Yes.
- 19 Q. -- and you are able to assist us with your
- 20 interpretation of that guidance; is that right?
- 21 A. Yes.
- 22 Q. If I could ask you then to look at page 17 of the
- version that was in force at the time of these works.
- I'm looking at the bottom left-hand column, "Use of the
- document", and we are told that:

- 1 "Sections 2 & 3 deal with means of escape from
- 2 dwellings and Sections 4 & 5 with buildings other than
- 3 dwellings. Section 2 is about dwellinghouses and
- 4 Section 3 is on flats and maisonettes. Section 4
- 5 concerns the design of means of escape on one level."
- 6 THE CORONER: Mr Maxwell-Scott, just before you go any
- 7 further --
- 8 Is the sunshine disturbing you? It's all right is
- 9 it or would you like the curtains closed?
- 10 THE FOREMAN OF THE JURY: There's a line of sun down the
- 11 middle of her monitor, I'm afraid.
- 12 THE CORONER: Would you like them closed a bit?
- 13 THE FOREMAN OF THE JURY: Up that end at least.
- 14 THE CORONER: Well, it's either all open or all closed, I'm
- 15 afraid. They work all together. We'll close them for
- 16 the time being.
- 17 Please, Mr Clark, would you mind doing that. Thank
- 18 you very much.
- 19 Yes, thank you, Mr Maxwell-Scott.
- 20 MR MAXWELL-SCOTT: Mr Martin, I've asked you about that
- 21 passage at the bottom of the left-hand column on page 17
- 22 and what is said there about the applicability of
- 23 Section 2, then Section 3 and then Section 4. Is it the
- 24 case that when one considers a hypothetical building, it
- 25 will fall either into Section 2 or into Section 3 or

- 1 into Section 4, but only into one of them?
- 2 A. Yes, that's the way the document's designed. There are
- 3 some buildings where you get all three and the different
- 4 points, that's the point at which where the Approved
- 5 Document -- you'd need specialist engineers to look at
- it. The document's designed for simpler buildings.
- 7 Q. In terms of Lakanal House, which of those sections 2, 3
- 8 or 4, in your view, applied or did more than one of them
- 9 apply?
- 10 A. In terms of this paragraph, Lakanal House is quite
- 11 straightforward and it's just a block of flats.
- 12 Q. So it's Section 3?
- 13 A. Yes.
- 14 Q. Does it follow from that that we can ignore Section 4,
- and the guidance that one finds in Section 4 that starts
- 16 at page 38?
- 17 A. I would expect so.
- 18 Q. I'll put that up.
- 19 A. Yes, sorry, I just looked at that, yes.
- 20 Q. I'll put that up on the screen for completeness. We see
- in paragraph 4.1 in the fifth line down:
- 22 "This section deals with the provision of means of
- escape from any point to the storey exit of the floor in
- 24 question, for all types of building other than dwelling
- 25 houses, flats and maisonettes (for which refer to

- 1 Sections 2 and 3)."
- 2 A. Yes.
- 3 Q. Just to complete this point, if you look at
- 4 paragraph 4.27 on page 44, which has been referred to
- 5 previously in evidence.
- 6 A. Yes.
- 7 Q. Is the short point that this paragraph simply does not
- 8 apply in the case of Lakanal House because we shouldn't
- 9 be looking in Section 4 of the guidance at all?
- 10 A. That's right, there are some situations -- the Approved
- Document has a tendency to cross-reference perhaps more
- than is helpful at times to try and avoid repeating the
- 13 same text, but without reading back through it
- 14 I couldn't be certain that this isn't referred to
- 15 elsewhere.
- 16 THE CORONER: Sorry, I didn't actually understand your
- answer, do we look at 4.27 or don't we?
- 18 A. I'm conscious that this is -- no, you wouldn't look at
- 19 that, sorry.
- 20 THE CORONER: Okay, thank you.
- 21 MR MAXWELL-SCOTT: What I want to ask you then about is the
- 22 theory that was put to Mr Walker that the external walls
- of Lakanal House, including therefore the panels
- 24 underneath the bedroom windows, should have had
- 25 120 minutes' fire resistance in order to comply with

- 1 table A2.
- 2 It will take a little bit of time to work through
- 3 this point. If we could start with definitions. If you
- 4 could take up our jury bundle and turn to tab 22, where
- we have the glossary that we've been using. (Handed)
- 6 Do you have that?
- 7 A. Yes.
- 8 Q. If you look on page 2, there is a description given
- 9 there of fire resistance, said to be distinguished from
- 10 surface spread of flame and the definition that we have
- 11 used is:
- 12 "The ability of a material product to resist the
- passage of fire from one side to another, ie acting as
- a barrier to fire spread."
- 15 Then on page 3 we have our working definition of
- 16 surface spread of flame:
- 17 "The propensity for a material or product to allow
- 18 the spread of flame or fire across its surface."
- 19 So that's the language that we have been using, and
- are you content to work with that, or do you see any
- 21 difficulties with that when we turn to Approved
- 22 Document B?
- 23 A. I think it serves your purposes.
- 24 Q. Thank you. If we then turn to page 87 in Approved
- 25 Document B. As I understand it, when we think about B4,

- 1 external fire spread, and the guidance that comes behind
- 2 it, this is where one starts, this is the requirement
- 3 itself, as set out in Schedule 1 to the
- 4 Building Regulations.
- 5 A. That's correct.
- 6 Q. We're interested in B4.(1):
- 7 "The external walls of the building shall adequately
- 8 resist the spread of fire over the walls and from one
- 9 building to another, having regard to the height, use
- 10 and position of the building."
- If you turn over the page, this is the beginning of
- 12 the guidance section, and I'll ask you to look towards
- 13 the bottom of the page, which I'll put on the bottom of
- 14 the screen in an moment, B4.ii and iii. The first of
- 15 those says:
- 16 "Provisions are made in Section 13 for the fire
- 17 resistance of external walls and to limit the
- 18 susceptibility of the external surface of walls to
- ignition and to fire spread."
- 20 That would seem to contain within it two concepts:
- 21 (1) fire resistance and (2) limiting fire spread on
- 22 external surfaces of walls; do you agree?
- 23 A. Yes.
- 24 Q. Using the glossary and definitions that we have in our
- jury bundle, we see there reference to the two concepts

- that I drew to your attention: (1) fire resistance and
- 2 (2) surface spread of flame; do you agree?
- 3 A. Yes.
- 4 Q. If I ask you then to go over the page to page 89, we see
- 5 at 13.1:
- 6 "Provisions are made in this section for the
- 7 external walls of the building to have sufficient fire
- 8 resistance to prevent fire spread across the relevant
- 9 boundary."
- 10 There are two phrases there: (1) is "fire
- 11 resistance" and (2) is "fire spread". Is "fire
- 12 resistance" being used there in the sense that we use it
- in our glossary?
- 14 A. In effect, yes.
- 15 Q. Then it says:
- 16 "The provisions are closely linked with those for
- space separation in Section 14 (following) which sets
- out limits on the amount of unprotected area of wall.
- 19 As the limits depend on the distance of the wall from
- 20 the relevant boundary, it is possible for some or all of
- 21 the walls to have no fire resistance, except for any
- parts which are load-bearing (see paragraph B3.ii)."
- That is on page 64. That's up on the screen now.
- 24 B3.ii deals with fire resistance:
- 25 "The fire resistance of an element of construction

- 1 is a measure of its ability to withstand the effects of
- fire in one or more ways as follows ..."
- 3 One of which is resistance to collapse, which
- 4 applies to load-bearing elements only. There's also
- 5 a resistance to fire penetration and resistance to the
- 6 transfer of excessive heat. So that's the
- 7 cross-reference to B3.ii. If we go back then to
- 8 Section 13, page 89. We're told that:
- 9 "External walls are elements of structure and the
- 10 relevant period of fire resistance (specified in
- 11 Appendix A) depends on the use, height and size of the
- building concerned. If the wall is 1,000 millimetres or
- more from the relevant boundary, a reduced standard of
- 14 fire resistance is accepted in most cases and the wall
- only needs fire resistance from the inside."
- 16 Then at 13.2:
- 17 "Provisions are also made to restrict combustibility
- of external walls of buildings that are less than
- 19 1,000 millimetres from the relevant boundary and,
- 20 irrespective of boundary distance, the external walls of
- 21 high buildings ..."
- 22 That passage in 13.2, is that a reference to surface
- 23 spread of flame issues?
- 24 A. Yes.
- 25 Q. I'll come back to that, but following through this

- 1 question of fire resistance requirements, we then have
- 2 13.3, a little lower down the page:
- 3 "The external walls of the building should have the
- 4 appropriate fire resistance given in Appendix A,
- Table A1, unless they form an unprotected area under the
- 6 provisions of Section 14."
- 7 So in short we are being referred to Table A1 unless
- 8 Section 14 tells us something different; is that right?
- 9 A. That's right.
- 10 Q. If we jump ahead to Table Al, just to refresh your
- 11 memory of it, it's on page 116. It's "Specific
- 12 provisions of test for fire resistance of elements of
- structure, et cetera". At point 5, "External walls," b
- "Any part 1,000 millimetres or more from the relevant
- boundary; See Table A2", unless there is something in
- note (5) which tells one otherwise; is that right?
- 17 A. Yes.
- 18 Q. We'll come back to note (5), but if we go on to
- 19 Table A2, this is on page 119. On the basis of your
- 20 earlier answer, we're in flats and maisonettes; is that
- 21 right?
- 22 A. Yes.
- 23 Q. We have a building, the top floor of which is more than
- 30 metres above ground level, so the fire resistance
- 25 requirement is 120 minutes, unless those two asterisks

- tell us something different, or unless there's something
- in Section 14 or note (5) which means we shouldn't reach
- 3 this table in the first place; is that right?
- 4 A. That's correct.
- 5 Q. Just covering the two asterisks:
- 6 "Reduced to 30 minutes for any floor within
- 7 a maisonette, but not if the floor contributes to the
- 8 support of the building."
- 9 Does that have any application to the external wall
- 10 where the panels under the bedroom windows are?
- 11 A. No.
- 12 Q. So we are looking at a fire resistance requirement of
- 13 120 minutes unless Section 14 or note (5) to Table A1
- tell us something different; is that right?
- 15 A. That's correct.
- 16 Q. If we go back then to page 118, note 5, we see on the
- 17 screen, actually refers us to Section 14:
- 18 "The guidance in Section 14 allows such walls to
- 19 contain areas which need not be fire-resisting
- 20 (unprotected areas)."
- 21 So it's therefore necessary to look at Section 14;
- is that right?
- 23 A. Yes.
- 24 Q. That starts at page 92. If you turn to page 94,
- 25 paragraph 14.7 addresses the topic of "Unprotected areas

- and fire resistance" and says:
- 2 "Any part of an external wall which has less fire
- 3 resistance than the appropriate amount given in
- 4 Appendix A, Table A2, is considered to be an unprotected
- 5 area."
- 6 So does it follow from that that the bedroom panels
- 7 underneath the bedroom windows, because they didn't have
- 8 fire resistance of 120 minutes, were unprotected areas?
- 9 A. That's correct.
- 10 Q. So then the question becomes whether they were permitted
- 11 to be unprotected areas or not.
- 12 A. That's right.
- 13 Q. If we turn on, then, to page 96, paragraph 14.14 deals
- 14 with "External walls 1,000 millimetres or more from the
- 15 relevant boundary", in other words one metre:
- "A wall situated at least 1,000 millimetres from
- 17 an any point on the relevant boundary will meet the
- 18 provisions for space separation if:
- "a. the extent of unprotected area does not exceed
- 20 that given by one of the methods referred to in
- 21 paragraph 14.15; and.
- 22 "b. the rest of the wall (if any) is
- fire-resisting."
- So does that introduce a concept whereby only
- 25 a proportion of an external wall is required to be

- fire-resisting?
- 2 A. That's right.
- 3 Q. Then immediately below that we have the concept of
- 4 acceptable unprotected areas introduced in the heading,
- 5 and we're told about the methods for calculating
- 6 acceptable unprotected areas. Paragraph 14.15 tells us:
- 7 "Two simple methods are given in this Approved
- 8 Document for calculating the acceptable amount of
- 9 unprotected area in a external wall that is at least
- 10 1,000 millimetres from any point on the relevant
- 11 boundary.
- "Method 1 may be used for small residential
- buildings ...
- "Method 2 may be used for most buildings or
- 15 compartments for which Method 1 is not appropriate, and
- is set no doubt paragraph 14.20 ...
- 17 "There are other more precise methods ..."
- I think it's right that Lakanal House is not a small
- 19 residential building, so we can ignore Method 1.
- 20 A. Yes.
- 21 Q. If we turn over the page, we can see what is said about
- Method 2. At the bottom of the left-hand column
- "Method 2 -- Other buildings or compartments":
- This method applies to a building or compartment
- 25 intended for any use and which is not less than

- 1 1,000 millimetres from any point on the relevant
- 2 boundary. The following rules for determining the
- 3 maximum unprotected area should be read with Table 16."
- 4 Then if we go to the top of the right-hand column,
- 5 the first "Note" says this:
- 6 "For any building or compartment more than 10 metres
- 7 in height, the methods set out in the BRE report
- 8 'External fire spread: Building separation and boundary
- 9 distances' can be applied."
- 10 Is the short point then that within this version of
- 11 Approved Document B one does not find the answer to
- whether the external walls of a building like Lakanal
- 13 House over 10 metres in height needed to be 120 minutes
- 14 fire-resisting or not, and that one in fact has to look
- in this BRE report?
- 16 A. That's right, you'd need to go off and use the
- 17 calculation methods or the tables that are in that
- 18 report, it's quite a -- there's a lot of tables in there
- that you can use to look up the appropriate boundary
- 20 distance and unprotected area.
- 21 Q. You will be anticipate pleased to hear that I'm not
- going to take you through all those calculations.
- I will, however, just put the document up on the screen
- 24 to identify it. Is that the relevant document on the
- 25 screen?

- 1 A. Yes, it looks like it, yeah.
- 2 Q. I'll just flick through some pages within it. The short
- 3 point is this, is it not, Mr Martin: that in order to
- 4 get the answer to this question, one would need to know
- 5 the distance from Lakanal House to the nearest building
- 6 close to it and one would then need to apply some of the
- 7 calculations set out in this BRE report; is that right?
- 8 A. Yeah, in practice you measure to the site boundary,
- 9 because with you can't predict where the other building
- 10 might be and buildings on either side after site
- 11 boundary might change. So the methods of calculation
- 12 use the boundary as being halfway between your building
- that you're designing and an imaginary building that's
- 14 the other side of the boundary.
- 15 Q. So had a formal application been made to the building
- 16 control department of the London Borough of Southwark,
- 17 those within that department would have needed to go
- 18 through that exercise?
- 19 A. They would have asked the applicant to confirm that
- 20 they -- or to explain how they'd addressed that issue,
- 21 and they would then double check to ensure that they
- were satisfied that the approach that was taken was
- acceptable.
- 24 Q. Would it be right that any person who was planning to
- 25 carry out works to Lakanal House that would reduce the

- fire-resisting properties of any part of the external
- 2 walls would need to go through that exercise in liaising
- 3 with building control?
- 4 A. They certainly should think about it, yes -- go through
- 5 that process.
- 6 THE CORONER: If they didn't go through that process, how
- 7 could they be confident about what they were proposing
- 8 to do?
- 9 A. They wouldn't be confident, they would need to go
- 10 through that process to satisfy themselves that what
- 11 they were doing was correct.
- 12 THE CORONER: Right.
- 13 MR MAXWELL-SCOTT: I'm not going to ask you to go through
- 14 that calculation for Lakanal House, but can you just
- give an indication of how one would do it and what you
- 16 would, in your experience and professional judgment,
- 17 expect the answer to be in terms of what percentage of
- 18 the external walls would be permitted to be unprotected
- 19 areas?
- 20 A. Sure. The approach that's taken within this document is
- 21 to assume that each -- only one fire is occurring in the
- 22 building at any one time and it's occurring within
- 23 a given compartment, which is one that's enclosed by
- 24 fire-resisting construction. In the case of a block of
- 25 flats, because each flat is formed as a fire-resisting

- 1 box, if you like, a single compartment, you end up with
- 2 a relatively small fire to deal with when you compare it
- 3 to say a department store, an office building, where the
- 4 compartments are much larger.
- 5 So, as a result, it's rare that you need to impose
- any fire resistance on the external envelope on a block
- of flats because you're dealing with such a small
- 8 compartment, and generally blocks of flats aren't built
- 9 that closely together. It's more of a problem usually
- 10 for office buildings built in dense city centres, like
- 11 you'll find in the City of London.
- 12 Q. Is it your view that it is highly likely that if that
- calculation were worked through, the area permitted to
- 14 be unprotected would in fact be 100 per cent of the
- 15 walls of Lakanal House?
- 16 A. I'd be quite surprised if it was anything else, but I've
- 17 not done the exercise.
- 18 THE CORONER: Just so we're clear on that, what is the
- 19 consequence of it being a permitted area?
- 20 A. There wouldn't be a requirement for fire resistance for
- 21 the external envelope of the building.
- 22 MR MAXWELL-SCOTT: Table A2 in the Approved Document would
- therefore not apply?
- 24 A. That's right.
- 25 Q. On the basis of your professional knowledge, can you

- 1 assist us with the extent to which the buildings that we
- 2 may have seen in the street, particularly in the City of
- 3 London, office buildings which are all glass or largely
- 4 glass, will be constructed of glass that is
- 5 fire-resisting to 120 minutes or not?
- 6 A. It's rare that you would have a building where you've
- 7 got that level of fire resistance for glazing, it's
- 8 an extremely expensive and complex exercise to go
- 9 through. You might find it in some of the more
- 10 sophisticated buildings that are built in the centre of
- 11 London, but if you look at, say, a building like
- 12 The Shard, which I think probably everybody in London's
- seen, that external envelope won't have fire resistance,
- 14 because it is a reasonable distance from adjacent
- buildings.
- 16 Q. That was what I wanted to ask you about: the question of
- 17 whether at the time, in 2006/2007, the external walls,
- and therefore the panels underneath the bedroom windows,
- 19 needed to be fire-resisting to 120 minutes.
- 20 If I could then cover two other issues that we've
- 21 heard about in evidence.
- 22 One is about the balconies themselves and the fact
- that they were escape routes, and I wanted to ask you
- 24 whether any different considerations related to them
- 25 because they were escape routes. Dealing with this

- 1 fairly shortly: is it right that you take the view that
- 2 paragraph 3.20 of Approved Document B is the most
- 3 relevant one for our purposes? That is on page 35.
- 4 A. Yes.
- 5 Q. For reasons that you've previously explained, we should
- 6 be looking, when choosing between sections 2, 3 and 4,
- 7 at Section 3, and this is the most relevant paragraph in
- 8 Section 3. Is it right, in short, that again we don't
- 9 get the answer to our question within Approved
- Document B, we have to go and look elsewhere?
- 11 A. That's right. In particular when you look at a building
- 12 like Lakanal House, it uses a design approach which has
- fallen out of favour for quite some years now, the idea
- of communal balconies generates lots of problems for
- 15 the -- the normal life of the building, so it's become
- 16 unpopular. So it's not something that we give detailed
- guidance on within the Approved Document.
- 18 Q. In making that decision not to give detailed guidance on
- 19 it in the Approved Document, do you bear in mind the
- 20 fact that there may be buildings with that design
- 21 feature which will be being refurbished or worked upon,
- and where there will therefore be a need for people to
- consult the Approved Document?
- 24 A. Yeah, I mean that's really what paragraph 3.2 is doing.
- 25 It is directing you to other documents that will give

- 1 you the information you need.
- 2 Q. So it directs the reader to British Standard 5588, which
- 3 we've previously looked at with Mr Walker. If I just
- 4 look at that with you, I think you think that figure
- 5 15(c) is most relevant. I'll put that up on the screen,
- 6 it's on page 31. Is that the figure that you consider
- 7 most relevant to this issue?
- 8 A. Yes.
- 9 Q. Is it your view that even that figure does not provide
- 10 a complete answer to our question?
- 11 A. That's right. Lakanal House is something of a hybrid
- 12 between the number of different design approaches that
- you find in this code, so it's necessary to try and
- absorb the principles and then apply them in -- in a way
- which seems logical. I'm afraid there isn't a black and
- 16 white answer to this question.
- 17 Q. I imagine you're not responsible for the contents of
- 18 British Standards in the way that you have some
- responsibility for the contents of Approved Document B;
- is that right?
- 21 A. That's right, we do have a -- we do input into the
- 22 committees that draft the standards, but we are one of
- 23 a number of different organisations that contributes to
- 24 the -- to their drafting.
- 25 Q. In drafting Approved Document B, you choose to refer to

- this British Standard?
- 2 A. Yeah, when we refer to another standard, we obviously
- 3 need to satisfy ourselves that it gives the best
- 4 available guidance that exists.
- 5 Q. So in fact, in relation to this specific point about the
- 6 fire resistance properties required along the balcony
- 7 escape routes at Lakanal, as I understand it, it's your
- 8 view that there is no black and white answer and
- 9 a degree of judgment is required to decide what is
- 10 necessary.
- 11 A. Yes.
- 12 Q. In practice, that question of judgment would be made by
- 13 whom?
- 14 A. Where there's a building control body involved, usually
- the designer and the building control body would discuss
- it between them and agree that -- on an interpretation
- 17 that they thought was appropriate. Sometimes there's
- 18 a certain amount of toing and froing between the
- organisations involved until they're satisfied that
- 20 what's being done is correct.
- 21 Q. If you could assist us through your professional
- 22 experience and thinking to some extent as well about
- your time as a building control surveyor, what happens
- 24 if the relevant parties disagree, the applicant and the
- 25 building control department reach different judgments?

- 1 A. If necessary, they can apply to the Secretary of State,
- 2 essential lip the department, for a determination. So
- if there's an application been put to a local authority,
- 4 and there's a disagreement between them and the
- 5 applicant that they can't resolve themselves, which is
- quite unusual, then they can apply to the department and
- 7 we'll determine that.
- 8 Q. In your current job at DCLG, do you have any part to
- 9 play in advising the Secretary of State should such
- 10 issues come before him?
- 11 A. Yes, that's part of my job.
- 12 Q. If I could ask you then about surface spread of flame,
- which we've understood to be a separate issue from fire
- 14 resistance. If I could ask you to look at Diagram 40 on
- page 91 of Approved Document B. This is headed
- 16 "Provisions for external surfaces or walls". Am I right
- in thinking we need to be looking at "e"?
- 18 A. Yes.
- 19 Q. So for the walls above 18 metres above ground level,
- 20 they were required to be Class 0; is that right?
- 21 A. That's right.
- 22 Q. Just for clarification, that would be panels but also
- any window frames or glass itself; is that right?
- 24 A. From recollection, there are exclusions for small parts,
- 25 small components of the external envelope, but generally

- 1 the main surfaces of the building would be expected to
- 2 be Class 0.
- 3 Q. That would include glazing?
- 4 A. Yes.
- 5 Q. Is glazing in and of itself by its nature Class 0?
- 6 A. Yes.
- 7 Q. I won't press you then on the question of the aluminium
- 8 frames, but panels and glazing would be required to be
- 9 Class 0 above 18 metres?
- 10 A. Yes.
- 11 Q. What about below 18 metres?
- 12 A. It allows, I think -- there's a rather lengthy
- description there. Essentially it's allowing things
- 14 which are a little bit more combustible, for instance
- 15 timber cladding and so on, so things that you might
- 16 think are more decorative might be used there. I think
- 17 the history of this is the presumption that the Fire
- 18 Service are able to deal with an external fire at those
- 19 levels from outside. Above that height they find it
- 20 difficult to apply water and take action.
- 21 Q. When you say "complicated explanation", are you
- 22 referring to this light grey shaded box --
- 23 A. Yes.
- 24 Q. -- where it says Index (I) or (1). You tell us which it
- 25 is.

- 1 A. I think it's an "I" from recollection.
- 2 Q. Thank you. I can see why you say it's a complicated
- 3 explanation. Cutting through it, was there any
- 4 requirement in relation to surface spread of flame
- 5 prevention below 18 metres at Lakanal House?
- 6 A. Well, they would need to comply with that pale grey,
- 7 which doesn't allow any material -- it does still
- 8 restrict the type of material used, but it's more
- 9 flexible than is applicable above 18 metres.
- 10 Q. Can I then finish off my questions by just exploring
- 11 with you the extent to which the version of Approved
- Document B which will come into force later in 2013
- 13 provides any different guidance to the questions that we
- 14 have been looking at? Taking it more shortly, I think
- 15 you have a copy of this as well.
- 16 A. Yes.
- 17 Q. I'll put this up on the screen. This is the 2006
- edition, incorporating 2007, 2010 and 2013 amendments,
- 19 available online from DCLG but not yet in force; is that
- 20 right?
- 21 A. That's correct.
- 22 Q. If we go to page 93 -- you say if I'm taking this too
- shortly, I don't want to look at all the previous
- 24 requirements -- I draw your attention here to Fire
- 25 Resistance Standard 12.3, which is identical to what was

- 1 in the version we looked at earlier, and in short tells
- 2 you to go to Table A1 unless Section 13 about
- 3 unprotected areas tells you to do something different;
- 4 is that right?
- 5 A. Yes.
- 6 Q. Then Table A1 is on page 122. We see there at 5.b, the
- 7 same provision that we looked at earlier in relation to
- 8 external walls, telling one to go to Table A2 unless
- 9 note (5) tells one to do something different; is that
- 10 right?
- 11 A. Yes.
- 12 Q. If we go on to Table A2 on page 124, we should be
- looking here, presumably, at residential blocks of
- 14 flats, is that right --
- 15 A. Yes.
- 16 Q. -- and more than 30 metres in height, if we go to the
- 17 right-hand column, and we have a distinction being drawn
- here between sprinklered and not sprinklered. Can you
- just explain this to us?
- 20 A. Yes, this was a change that was introduced in 2006, that
- 21 blocks of flats over 30 metres in height should have
- 22 a sprinkler system installed, so that's essentially how
- that's being expressed there. If you looked that up in
- the table you'd find you wouldn't be able to have
- a block of flats above 30 metres unless it was

- 1 sprinklered.
- 2 Q. What implications, if any, did that have for buildings
- 3 already in existence before that requirement came into
- 4 force?
- 5 A. These provisions aren't retrospective, so this would
- 6 have an impact on a building that was being built for
- 7 the first time. When you're altering an existing
- building, you go back -- I think you've discussed some
- 9 time before the concept of not making a building worse
- 10 than it was before, so that would be the judgment that
- 11 the building control professionals and the designers
- 12 would be -- would have to make: not making it worse, so
- not necessarily requiring a building to be upgraded to
- 14 the new standard.
- 15 Q. So if you built Lakanal House from scratch now you'd
- 16 have to put sprinklers in?
- 17 A. Yes.
- 18 Q. But, as you say, the requirement's not retrospective, so
- what are we being told about 120 minutes: 120 minutes
- 20 applies unless note (5) applies or unless the section on
- 21 unprotected area applies; is that right?
- 22 A. Yeah, I think the approach you'd take is -- you'd come
- 23 to the same conclusion as we did with the 2002 edition.
- 24 Q. Just working through that, looking now on page 101, the
- 25 first note under "Method 2," paragraph 13.20, is it

- 1 right that again in this version of the document you
- don't get an answer to the question, but you're referred
- 3 to the BRE report that we looked at earlier?
- 4 A. That's right.
- 5 Q. Then you were asked to assist us with what plans the
- 6 Department for Communities and Local Government has to
- quidance. Well, we know that there it is
- 8 being updated because there is a new version just
- 9 waiting to come into force and we've looked at the
- 10 relevant provision. What plans are there to alter the
- 11 style in which the approved documents are written?
- 12 A. Well, the changes that are happening this year are quite
- 13 minor, they just relate to a specific technical --
- there's a couple of technical problems that have arisen
- because of changes in the way that construction products
- 16 are regulated. It's a European directive which has had
- 17 impact on things, it's not relevant to this case at all.
- 18 As a department, we've developed a new style of
- drafting approved documents, which is designed to make
- them easier to read. That involves applying the general
- 21 principles of plain English wherever we can and the
- 22 actual style of the document itself has been changed.
- For instance, you'll probably appreciate this having
- 24 worked your way through this online is that we're moving
- 25 to a single column format which makes it a lot easier to

- 1 look at on a computer.
- 2 Q. What about the fact that for older buildings, which are
- designed in an way that is now considered obsolete, such
- 4 that new buildings would not adopt the same approach,
- 5 what we've seen in this case is that one doesn't get the
- 6 answer from Approved Document B itself, but one is
- 7 referred to other documents; will that still be the
- 8 case?
- 9 A. I think that's inescapable. If you imagine, there's
- 10 building work going on today in castles that would have
- 11 been built before anyone had even considered the issue
- of fire safety, and so professionals will always need to
- make -- apply a certain amount of judgment in the way
- 14 that they apply the regulations to existing buildings.
- 15 Q. Thank you very much, Mr Martin, those are my questions,
- but others may have some.
- 17 THE CORONER: I think we'll have a short break before we
- deal with any further questions.
- 19 Members of the jury, would you be back by 11.55,
- 20 please. You're welcome to leave your papers if you
- 21 want.
- Mr Martin, we'll have a break, be back for 11.55.
- Because you're part way through giving your evidence,
- 24 the strict rule is you must not talk to anyone about
- your evidence or indeed this matter.

- 1 A. Okay.
- 2 (11.44 am)
- 3 (A short break)
- 4 (12.00 pm)
- 5 THE CORONER: Mr Leonard, sorry, you're now in the sun, are
- 6 you all right like that?
- 7 MR LEONARD: Absolutely fine, thank you.
- 8 THE CORONER: Do say if you're not.
- 9 MR LEONARD: I will.
- 10 (In the presence of the Jury)
- 11 THE CORONER: Thank you. Members of the jury, we've opened
- 12 the curtains, as you can see. Is that now a problem for
- you with the sun?
- 14 THE FOREMAN OF THE JURY: It's fine, thank you.
- 15 THE CORONER: We'll keep an eye on it. If it's a problem do
- 16 say. Thank you very much. Yes, thank you.
- Yes, Mr Hendy?
- 18 Questions by MR HENDY
- 19 MR HENDY: Mr Martin, my name's Hendy, I represent some of
- 20 the bereaved. Just so the position is clear to you and
- 21 to the jury, Mr Martin, having read your evidence and
- heard what you have said today, we accept your analysis
- of the way in which Approved Document B applied to the
- 24 external walls of Lakanal House. Nevertheless, I do
- 25 want to ask you some questions about where that leads

- 1 us.
- I think you were in court, were you, when Mr Walker
- 3 was giving evidence last week?
- 4 A. That's right, yes.
- 5 Q. You heard then the analysis of Approved Document B that
- I put to Mr Walker, and the flaw in that is, although we
- 7 started at the right place, namely external walls under
- 8 paragraph 13.3, we failed to take into account Section 4
- 9 which, as you've explained to Mr Maxwell-Scott, means
- 10 that you have to do a further analysis to see whether
- these are permitted unprotected areas.
- 12 A. Yes.
- 13 Q. So that analysis was wrong. Likewise, Mr Walker's
- analysis, his first analysis, which was that one tries
- to find some kind of analogy with external stairs and so
- forth, which led him to the view that there was
- 17 a 30-minute fire resistance necessity, that too was
- 18 wrong, wasn't it?
- 19 A. Yes.
- 20 Q. He also, when he came back on the second day, said that
- 21 the analysis I put was wrong because the Table A2 which
- 22 specifies 120 minutes and so forth didn't apply to
- 23 non-load-bearing walls, it was only relevant to
- load-bearing walls. That, too, was wrong.
- 25 A. Yes.

- 1 Q. Likewise, his conclusion that panels under the bedroom
- 2 window should be fire-resistant for 30 minutes was
- 3 a wrong conclusion.
- 4 A. Yeah.
- 5 Q. There was a suggestion made outside the formal
- 6 proceedings of this inquest, merely in discussions
- 7 amongst interested parties, that Table A2 with its
- 8 120-minute fire-resistance didn't apply here because the
- 9 outside surfaces of Lakanal House were not external
- 10 walls, they were something else. That too would be
- a wrong analysis, wouldn't it?
- 12 A. Yeah, in my opinion, yes.
- 13 Q. Given that there were so many wrong analyses by people
- 14 who were applying their mind to Approved Document B, do
- 15 you agree that it might be desirable if Approved
- 16 Document B could be revisited and reworked so that it
- 17 was clearer to those who had to apply it as to what the
- 18 conclusions ought to be?
- 19 A. That's an interesting point. Trying to make these
- 20 documents simple to use is a challenge. Designing
- 21 buildings is a complex subject. My own experience from
- dealing with the enquiries that I get is generally most
- 23 professionals in the industry seem to cope with applying
- 24 the guidance without too much difficulty. If it was
- 25 generating the kind of problems that you might imply

- from the discussions you've had here, I think I would
- 2 know about it, and I don't.
- 3 Q. Well, I don't want to embarrass Mr Walker, he's not here
- 4 now, but he was a member of the Royal Institution of
- 5 Chartered Surveyors, he was asked questions on the
- 6 footing that he was an expert in these matters and yet
- 7 he managed to get this wrong, and we rather thought that
- 8 perhaps that might be typical amongst the chartered
- 9 surveying fraternity that have to apply these
- 10 regulations?
- 11 A. I don't know Mr Walker's background.
- 12 Q. Of course.
- 13 A. In particular, I think it would be wrong to assume that
- 14 all chartered surveyors have the same experience and
- have worked in the same areas. A lot of surveyors will
- spend much of their time dealing with repairs and
- 17 refurbishment, that kind of thing, so might not
- 18 necessarily deal with all aspects of the Building
- 19 Regulations that you would apply when designing a new
- 20 building.
- 21 Q. Understood. Well, it's a matter for our coroner, who
- 22 has the power to make recommendations for the future,
- and we've heard what you've said about the introduction
- of plain English and designing this document so instead
- of being two columns it's one column, but it might be

- 1 something that the coroner might have in mind as
- 2 recommending that this document really should be
- 3 re-edited in order that there can be no ambiguities of
- 4 this kind in the future. What would you say to that?
- 5 A. I think the idea that you could have no ambiguities,
- 6 I think, is --
- 7 Q. Well, that's probably --
- 8 A. -- is a nice objective. I'd be surprised if it's
- 9 possible.
- 10 Q. But nevertheless, there could be some reworking,
- 11 couldn't there, to increase clarity?
- 12 A. Any document can be improved, yeah.
- 13 Q. Where we went wrong in our analysis was not to apply
- 14 Section 14, which is a section which is devoted to the
- 15 separation of buildings and ensuring that a fire in one
- building doesn't cause a fire in another building,
- 17 essentially.
- 18 A. Yes.
- 19 Q. The answer for a high rise block over 10 metres is the
- 20 BRE document that Mr Maxwell-Scott referred you to.
- 21 A. That's right.
- 22 Q. The computation, putting it in very general terms, is
- you have to know the height, the width and the distance
- of the edge of the building to the boundary with any
- other buildings that there are.

- 1 A. That's right, and you do it systematically looking at
- 2 each compartment. In a block of flats, they're quite
- 3 small.
- 4 Q. Yes. I don't want to go further into the computations
- 5 than that, but if Mr Maxwell-Scott does have the BRE
- 6 document I wonder if we could just look at one page,
- 7 which is page 8, if we could go to the bottom of it. Do
- 8 you have the actual document there, Mr Martin?
- 9 A. I haven't to hand, no.
- 10 Q. We have a spare here, it's probably easier for you if we
- 11 give you a hard copy. (Handed)
- 12 We have to do this in two halves, as it were, so the
- jury can follow this. Perhaps we should look at the top
- 14 of the page first of all. We have a series of figures
- 15 here which indicate the distance from the relevant
- 16 boundary for unprotected percentage not exceeding
- 20 per cent, 30 per cent, 40 per cent, and so on, up to
- 18 100 per cent, right? Those are the columns downwards.
- 19 Then on the left-hand side we have the enclosing
- 20 rectangle, 12 metres high, and then the jury can see the
- 21 next one is 15 metres high and the bottom one is
- 22 18 metres high.
- We don't have to perform the calculation, I wouldn't
- dream of doing it with you now, but if we look right at
- 25 the bottom, which is the extreme of the table, we have

- enclosing rectangle 18 metres high and we have the width
- of the enclosing rectangle in the extreme left-hand
- 3 column going from three metres up to no limit.
- 4 Mr Edwards and I think that the width of the
- 5 enclosing rectangle is 57 metres but, regardless of
- 6 that, let's assume that it's of no --
- 7 A. Can I just correct you there?
- 8 Q. Yes.
- 9 A. You'd look at each compartment, and each compartment is
- 10 one flat, so you'd be looking at the width of a flat.
- 11 Q. All right. Nevertheless, bear with me. Let's assume
- 12 a building of no limit, to see what the extreme could
- 13 be, and if we go across to the 100 per cent column and
- we're looking at the figures in brackets -- because
- that's for residential, isn't it, yes --
- 16 A. Yeah.
- 17 Q. -- the distance is 24 metres. That means that any
- distance greater than 24 metres, no matter what the
- 19 enclosing rectangle is, could have 100 per cent
- 20 unprotected face to it.
- 21 A. Yes.
- 22 Q. Is that right?
- 23 A. Yes.
- 24 Q. So when one was looking at Lakanal House, as long as the
- 25 nearest adjacent building was in excess of 24 metres

- 1 away -- or the boundary between it and the next building
- 2 was more than 24 metres away, it could have 100 per cent
- 3 lack of fire resistance on its face?
- 4 A. Yes.
- 5 Q. We can put that away. The jury have a diagram in their
- jury bundle at tab 11 at page 4, which should be
- 7 available to you. It might on the table.
- 8 Thank you, Mr Clark.
- 9 Divider 11, page 4, there we have Lakanal House in
- 10 pink. North is towards the holepunch side of the page.
- 11 We have some adjacent blocks of flats, low rise, with
- 12 an arrow, "Fontenelle", directed towards them. So as
- long as the boundary between the nearest building and
- 14 Lakanal House was in excess of 24 metres, then no matter
- what the dimensions of Lakanal House were, it could be
- 16 100 per cent without fire resistance on its western
- 17 flank.
- 18 A. Yes.
- 19 Q. As you say, that computation and the application of
- 20 those tables is something that building control would
- 21 need to do in order to be confident that any changes to
- that western flank were 100 per cent unprotected?
- 23 A. Yes.
- 24 Q. Can I ask you just one technical question about that?
- 25 If we look at a photograph of Lakanal House -- I had one

- a moment ago and now I've lost it, just give me one
- 2 moment. There's one right at the end of tab 12, at
- 3 page 35, this was after the fire. In order to calculate
- 4 the actual unprotected proportion of that western flank
- 5 that we're looking at, you have to extract the concrete
- 6 rim round the building downside and at the top, and you
- 7 have to take out other areas of incombustible concrete,
- 8 haven't you?
- 9 A. That's right.
- 10 Q. Looking at that, it looks as if probably the unprotected
- 11 face of that building was about -- well, well over
- 95 per cent and approaching 100 per cent, but not quite.
- 13 A. Yeah, I think that's reasonable.
- 14 Q. If the computations applying the BRE table say that
- 15 you're allowed -- this is hypothetical question. If the
- 16 computations table said "The permitted proportion of
- 17 unprotected flank would be 85 per cent, but in fact you
- 18 have 95 per cent unprotected", what are the
- 19 consequences, how do you deal with that, or do you have
- 20 to look at each compartment then separately?
- 21 A. Well, the exercise you would do would go through each
- 22 compartment separately anyway.
- 23 Q. Yes.
- 24 A. But if you didn't have enough protected areas, you'd
- 25 have to protect some more area.

- 1 Q. So you might put in protection in the top layers, would
- 2 you, at least accessible to the Fire Brigade?
- 3 A. Yes, conventionally when you look at most buildings, you
- 4 tend to find that the windows are the unprotected areas
- 5 and the walls around them are protected.
- 6 Q. Exactly.
- 7 A. But in situations like Lakanal House, where it's not
- 8 unusual to find the whole building -- it's permissible
- 9 to have 100 per cent unprotected areas.
- 10 Q. So far as the external walls of the maisonettes that
- 11 faced onto the fire escape balconies -- that's to say of
- 12 the lounge and kitchen -- are concerned, in your witness
- 13 statement at page 746 -- perhaps we could just put that
- on the screen, at paragraph 15.
- 15 Having explained your reasoning in the previous
- 16 paragraph, you say this in 15:
- 17 "In my view, providing fire resistance to the
- 18 balcony would not have been necessary as each flat had
- 19 access to a route which was enclosed in fire-resisting
- 20 construction (the corridor)."
- 21 When you say "fire resistance to the balcony", you
- 22 mean the external wall of the maisonette, the lounge
- 23 wall and the kitchen wall?
- 24 A. That's right, separating the flat from the balcony.
- 25 Q. So your conclusion is that there was no requirement --

- 1 let me put it another way. Your conclusion is there was
- 2 no requirement for fire resistance in either the bedroom
- 3 panels or the panels below the bedroom window or in the
- 4 lounge or kitchen?
- 5 A. That's correct, but, as I set out in my statement,
- 6 it's -- certainly the panels adjacent to the balcony --
- 7 there's an element of judgment required to take a view
- 8 on that because there isn't a specific piece of guidance
- 9 that you can point at that describes a building of this
- 10 design.
- 11 Q. On that footing, the fitting of panels which caught fire
- 12 within one minute and burnt through within four and
- a half minutes would be, what, perfectly acceptable in
- 14 accordance with Approved Document B?
- 15 A. Well, if they caught fire, they probably weren't
- 16 Class 0.
- 17 THE CORONER: Well, that does ignore the Class 0 issue,
- doesn't it, Mr Hendy?
- 19 MR HENDY: Yes, let's leave aside Class 0 for the moment,
- 20 I'm going to come back to it.
- 21 A. Okay.
- 22 Q. But, so far as fire resistance is concerned, it was
- 23 perfectly acceptable to put panels that burnt through
- 24 within four and a half minutes?
- 25 A. Yes.

- 1 THE CORONER: Yes, well, I don't think that's a very fair
- 2 assumption on which to put a question, because we know
- 3 we're looking at Class 0 here, don't we? Anyway, carry
- 4 on.
- 5 MR HENDY: I'm sorry, madam, I'm missing your point.
- 6 THE CORONER: It's the premise on which you're putting the
- 7 point to Mr Martin.
- 8 MR HENDY: Yes, well the premise is that there's no
- 9 requirement for fire resistance on his evidence, and
- 10 therefore it would be acceptable, in accordance with
- 11 Approved Document B, for panels to be susceptible to be
- 12 burnt through within four and a half minutes.
- 13 A. Yeah, you could have, for instance, a Juliet balcony,
- 14 you could actually have an opening there.
- 15 Q. The premise so far in this Inquest has been that the
- 16 panels were at least 30-minute fire resistance, and it
- may be that the jury -- indeed, the wider public --
- 18 might be horrified to learn that there was no
- 19 requirement for fire resistance in high rise residential
- 20 buildings more than 24 metres from the relevant
- 21 boundary -- I'm leaving aside Class 0, flame spread --
- but no fire resistance at all.
- 23 A. I can't predict what the public would think --
- 24 Q. No.
- 25 A. -- but that's the situation.

- 1 Q. But isn't that something that you, when speaking to the
- 2 ministers next, might want to raise with them?
- 3 A. No, I mean -- this is probably quite technical.
- 4 Essentially, a fair bit of research has been done in
- 5 this area in the past and the conclusion's been that
- 6 once you get a fire -- a significant fire, if you can
- 7 imagine a flat that's fully involved in a fire, and that
- 8 fire's broken out of the windows, the flames coming out
- 9 of the top of those windows will be at least a storey
- 10 height tall, so the only way -- if you wanted to
- 11 completely prevent fire spreading back into the
- 12 building, then the entire envelope of the building would
- 13 need to be fire-resisting, which would be the end of
- 14 windows. So you wouldn't be able to have windows in
- 15 blocks of flats anymore.
- 16 THE CORONER: I think that's probably as far as we can take
- 17 that one, Mr Hendy.
- 18 MR HENDY: Can I ask you about Section 13.2 in Approved
- Document B, this is at page 79. Mr Maxwell-Scott took
- you to it. This is in the introduction to Section 13,
- 21 and it says:
- 22 "Provisions are also made to restrict the
- 23 combustibility of external walls of buildings that are
- less than 1,000 millimetres from the relevant boundary
- and, irrespective of boundary distance, the external

- 1 walls of high buildings and those of [other groups].
- 2 This is in order to reduce the surface's susceptibility
- 3 to ignition from an external source, and to reduce the
- 4 danger from fire spread up the external face of the
- 5 building."
- 6 As I understand it, your evidence is that that
- 7 paragraph is devoted to flame spread rather than fire
- 8 resistance.
- 9 A. That's right.
- 10 Q. So there's no discord between your analysis and that
- 11 paragraph?
- 12 A. No.
- 13 Q. Can I ask you about British Standard 5588? We looked at
- 14 page 31, and we saw that the walls there are marked --
- 15 the external walls onto the balconies in that diagram
- 16 are marked with dots and dashes, which under the key
- 17 says "Fire-resisting construction up to a height of
- 18 1.1 metres above deck level". Is your evidence that
- 19 that would apply but for the fact that these flats had
- 20 access to an internal corridor?
- 21 A. That's how I would interpret that diagram in relation to
- 22 the layout of Lakanal House but, as I say, there's
- an element of judgment in that you might well find other
- 24 professionals who take a different view.
- 25 Q. Right. The fire-resisting construction of course would

- 1 be 30 minutes, according to this standard.
- 2 A. Yes.
- 3 Q. Can I next ask you about the Building Regulations
- 4 themselves. If I could ask for Appendix 1, B3 to be put
- 5 up, please?
- 6 THE CORONER: Well, Mr Martin is here to help us with
- 7 Approved Document B, not the Building Regulations,
- 8 Mr Hendy.
- 9 MR HENDY: Indeed, madam, but Approved Document B is
- 10 guidance on the application of the Building Regulations
- and I just wanted to ask him whether they were
- 12 consistent with the regulation itself.
- May I have B3 up in appendix 1, thank you?
- 14 Thank you. If we look at B3(3), the requirement is
- 15 to:
- 16 "... inhibit the spread of fire within the building.
- 17 It shall be divided with fire resisting construction to
- an extent appropriate to the size and intended use of
- 19 the building."
- I assume, in your view, the requirement of Class 0,
- 21 non-flame spread, is sufficient to accomplish that
- 22 objective, is it?
- 23 A. That's not what it's dealing with. What I'm talking
- about, that deals with requirement B4. B3 is about fire
- spread within the building, so that would be the walls

- and floors enclosed within the flats themselves.
- 2 Q. Right. So, in your view, B3 doesn't refer to the spread
- 3 of fire via the outside?
- 4 A. That's right.
- 5 Q. Right. Could we look at B4(1) at the bottom of the
- 6 page:
- 7 "The external walls of the building shall adequately
- 8 resist the spread of fire over the walls and from one
- 9 building to another, having regard to the height, use
- and position of the building. External walls shall
- 11 adequately resist the spread of fire over the walls."
- Does that not call for fire resistance as well as
- resistance to flame spread?
- 14 THE CORONER: Well, I think that's more a question of
- interpretation of regulations, Mr Hendy, so I think we
- won't ask Mr Martin that.
- 17 MR HENDY: There's no doubt that the external walls both in
- 18 the bedroom, the lounge and the kitchen all had to be
- 19 Class 0, according to Approved Document B.
- 20 A. Yes.
- 21 Q. One final matter -- no, I needn't ask you that. Thank
- 22 you very much, Mr Martin.
- 23 THE CORONER: Thank you. Mr Dowden? Ms Al Tai?
- 24 Mr Walsh?

25

- 1 Questions by MR WALSH
- 2 MR WALSH: I'll be very brief, Mr Martin, it is about
- 3 Class 0. It has always been uncontroversial,
- 4 undisputed, that the panels below the bedroom, in the
- 5 bedroom windows here, should have been of that class.
- 6 I'm going to ask you this: the requirements of
- 7 Class 0 are there for the purpose of preventing the
- 8 surface spread of flame across a surface --
- 9 A. Yes.
- 10 Q. -- they apply 18 metres and above for what reason?
- 11 A. To -- well, why the 18 metres, do you mean?
- 12 Q. Why 18 metres?
- 13 A. Because below 18 metres there's a presumption that the
- 14 fire service are more able to deal with a fire at that
- 15 level.
- 16 Q. All right, so it has in part at least to do with
- 17 firefighting?
- 18 A. Yes.
- 19 Q. Class 0 is the most restrictive of all the classes, it
- is the most stringent.
- 21 A. You can move to non-combustible, which is slightly more
- 22 stringent.
- 23 Q. Oh, you can move to absolutely non-combustible, but
- 24 doesn't --
- 25 A. Yes, that limits your choice of materials quite

- 1 significantly though.
- 2 Q. All right. So far as the other classes are concerned,
- 3 Class 0 is a restrictive class?
- 4 A. Yes.
- 5 Q. It is there to prevent not only the spread of flame
- 6 across a surface, but the ignition, which is the
- 7 precursor to the spread of flame across the surface.
- 8 A. In simple terms, yes.
- 9 Q. Yes. It is designed to prevent, on the exterior
- 10 envelope of the building, fire travelling from floor to
- 11 floor in an way that makes it difficult to deal with
- from a fire authority's point of view?
- 13 A. That's right.
- 14 Q. Obviously, touching upon what you said earlier, if one
- is looking at whether or not one should have Class 0 in
- a material or not, one would be expected to go to speak
- 17 to building control and speak to them about the sorts of
- 18 matters you were talking about earlier --
- 19 A. Yes.
- 20 Q. -- to receive advice. I believe that will do, thank
- 21 you.
- 22 THE CORONER: Thank you. Mr Matthews.
- 23 Questions by MR MATTHEWS
- 24 MR MATTHEWS: Mr Martin, can I get your help on a little
- 25 first of what you have been asked. Class 0, and the

- 1 purpose of Class 0 above 18 metres. We're talking about
- fire creeping up the exterior of a building or creeping
- 3 along the exterior of a building -- and I use that term
- 4 advisedly -- in other words the flames spreading on the
- 5 actual exterior; is that right?
- 6 A. That's right.
- 7 Q. But that's not by any means the whole picture when it
- 8 comes to fire spreading from floor to floor in
- 9 a building, because of what you've told us about
- 10 glazing.
- 11 A. Yes.
- 12 Q. So, in other words, there's a recognition that when
- a compartment is fully on fire, flames are going to come
- out of where the glazing has been, because the glazing
- isn't fire-resistant, and when it does, there's
- a real -- "likelihood" may be the wrong word, I don't
- 17 know -- there's the very real potential, because of the
- size of the flames, for it to spread to the floor above.
- 19 A. Yes, it sometimes does.
- 20 Q. I hope that's clear. I'll move on to something else.
- 21 I'm just a little concerned because, partly through
- 22 my instigation, we've ended up with the jury having
- 23 selected pages of Approved Document B, and frankly now,
- having heard your evidence, it sounds like we've got
- 25 mostly irrelevant pages of Approved Document B. Can

- 1 I just demonstrate that for us, so we can be left in no
- doubt. I think the jury have in Approved Document B
- 3 page 44. I'm only pausing to let everyone get there.
- 4 (Pause)
- 5 Page 44, we got part of this section, Section 4,
- 6 through Mr Walker taking us there. We can see it's
- 7 headed "Buildings other than dwellings". I think it's
- 8 your evidence that -- I think put politely -- it's
- 9 fundamentally wrong to go to this section, "Buildings
- 10 other than dwellings", when considering Lakanal.
- 11 A. Yeah, the design of blocks of flats is very different
- 12 from other types of buildings.
- 13 Q. Right.
- 14 A. That paragraph is quite similar to some of the quidance
- that's in the British Standard, but it's applied
- 16 differently because you're using a different evacuation
- 17 strategy.
- 18 Q. Understood, it's only that, bear in mind the position
- we've left everybody in, we have pages that really
- shouldn't be with us, this is the wrong area to be in?
- 21 A. Yes.
- 22 Q. Right. So stepping back, can I see if this is a fair
- summary: to comply with what we call Schedule 1 to the
- 24 Building Regulations, and Approved Document B is part of
- 25 the guidance that sits behind it, the bedroom panels

- didn't have to be fire-resistant; is that right?
- 2 A. Compliance with Schedule 1 is slightly -- that's the
- 3 law, and --
- 4 Q. Okay.
- 5 A. Sorry, I don't want to say something which is incorrect.
- 6 Q. No, you are you're quite right.
- 7 Approved Document B then. To comply with Approved
- 8 Document B, the bedroom panels didn't have to be fire
- 9 resistant.
- 10 A. That's right.
- 11 Q. It's also your view that to comply with Approved
- Document B, along the balcony did not have to be
- 13 fire-resistant.
- 14 A. Yes, but there's an element of judgment involved in how
- 15 you might come to that decision.
- 16 Q. Yes. Equally, though we haven't considered it, the
- 17 balcony panels, what the balcony was made of, didn't
- 18 have to be fire-resistant, the actual balcony.
- 19 A. Oh, the balustrade?
- 20 Q. The balustrade, yes.
- 21 A. No.
- 22 Q. Can I put it this way: the removal of asbestos is not
- 23 an issue?
- 24 THE CORONER: Well, I think that's going beyond the bounds
- of Approved Document B, isn't it, Mr Matthews?

- 1 MR MATTHEWS: Frankly, I don't know, if you say so.
- 2 THE CORONER: I think it is, I think that jumps back into
- 3 Building Regs.
- 4 MR MATTHEWS: Then I'm sorry. Can I ask you this, then, but
- 5 pause before you answer in case I'm making the same
- 6 mistake: it's only that you've listened to the evidence
- of Mr Walker and he gave us his view that these works
- 8 needed to be the subject of a full plans application.
- 9 I don't know whether it's fair or appropriate to ask you
- 10 and I don't know the answer, whether that's something
- 11 you agree with.
- 12 THE CORONER: Well, Mr Walker came along to give us expert
- evidence on that. Mr Martin isn't in that position.
- 14 MR MATTHEWS: Right. Then if I can just think for no more
- than 15 seconds, that may be all that I have to ask.
- I don't think I can take anything any further.
- 17 THE CORONER: Thank you. Mr Compton?
- 18 Questions by MR COMPTON
- 19 MR COMPTON: Ben Compton, I act on behalf of Apollo Property
- 20 Services.
- 21 Can we just take a couple of steps back, then.
- You've taken us through the documents. I'm sure we've
- all followed it exactly, but is this the position that
- 24 we arrive at in respect of the bedroom windows and the
- 25 panels below the bedroom windows -- and in particular

- one's thinking of the bedroom where Catherine Hickman
- 2 was -- do you accept that that effectively was
- 3 an unprotected area?
- 4 A. Yes.
- 5 Q. Thank you. Does an unprotected area mean it offers no
- fire resistance?
- 7 A. Yes.
- 8 Q. Thank you. In other words, it doesn't prevent fire
- 9 spread from outside to the other?
- 10 A. That's right.
- 11 Q. Thank you. Just one point: you were asked by Mr Walsh:
- 12 Class 0 externally, but Class 3 internally; is that
- 13 right?
- 14 A. Yes, that would be right.
- 15 Q. Thank you. I just want to deal with one other matter
- that's a little technical, but I hope we can do this
- 17 briefly. I want you, if you would, to go to the jury
- bundle, tab 11, page 13. I'll just wait until everyone
- 19 has that document. (Pause)
- 20 THE CORONER: Are we tab 11, page 13?
- 21 MR COMPTON: Please.
- 22 THE CORONER: I have a diagram.
- 23 MR COMPTON: It's the diagram, indeed.
- I just want to ask you about this so we can try to
- 25 envisage how you work out permitted unprotected

- 1 percentages, in other words distances to other
- buildings, because that's what this is all about, isn't
- 3 it?
- 4 A. Well, that's one of the issues, yes.
- 5 Q. Yes. With this particular issue, you were being asked
- 6 by Mr Hendy about whether it's the whole building upon
- 7 which one calculates the percentage, or whether it's the
- 8 compartment, and it is in fact the compartment that one
- 9 looks at; is that right?
- 10 A. That's correct.
- 11 Q. If one looks at this particular diagram, assuming that
- the bedrooms 1 and 2 and the kitchen were on fire, would
- that be the correct approach?
- 14 A. Yes.
- 15 Q. So is this right, if one has the kitchen there, the
- bedrooms, that is the facade that's on fire, to carry
- out the calculation, do you put a sort of notional
- 18 vertical rectangle around that area?
- 19 A. To use the tables in that report, that's what you'd do:
- is use one of the standard rectangles that fits over
- 21 that shape.
- 22 Q. You would just draw a rectangle -- I appreciate, members
- of the jury, I'm a long way away from you -- but you'd
- just draw a rectangle across -- a vertical one, across
- 25 that facade; is that right?

- 1 A. Yes.
- 2 Q. We know that, because of the scissor effect of these
- 3 particular flats, that above the bedroom of course is
- 4 another flat, if one looks at the left-hand side.
- I hope everyone's following me. So it could never be
- 6 100 per cent percentage, could it, on looking at that,
- 7 when you're carrying out your calculations? Because you
- 8 have to have the area above the bedroom, and then you do
- 9 your calculation that way. It couldn't possibly be
- 10 100 per cent of the facade if one has the area above the
- 11 bedroom.
- 12 A. I'm not sure if I fully understand how you've read that.
- 13 Q. All right. If one draws the rectangle -- we've done
- some calculations that it's approximately 65 per cent,
- 15 that sort of area -- would that surprise you -- of the
- area that is the permitted unprotected percentage.
- 17 A. I'd have to -- that seems strange. I'm not quite sure
- 18 how you've come to that.
- 19 Q. All right, let me take it back. If we don't get any
- further, we don't get any further. Deal with it in your
- 21 own way. You have your rectangle, all right? What do
- you do next when you have your rectangle?
- 23 A. You'll go to the tables, having established which
- 24 rectangle is appropriate.
- 25 Q. Yes.

- 1 A. You look at the boundary distance, and that will tell
- 2 you for that compartment what the permitted unprotected
- 3 area would be.
- 4 Q. All right, can we just go to the table for a moment.
- 5 Can we go to page 7, on table 1.
- 6 THE CORONER: Is that the page you wanted, Mr Compton?
- 7 MR COMPTON: Yes. Do you have it in front of you?
- 8 A. Yes.
- 9 Q. If you could just have a look at that. Of course, we're
- 10 taking the height of the compartment, not the building
- 11 itself.
- 12 A. That's right.
- 13 Q. So we have to remind ourselves about that. If you go to
- enclosing rectangle -- page 7. If you go to enclosing
- 15 rectangle six metres high, all right --
- 16 A. Yes.
- 17 Q. -- do you accept that would be the correct one to look
- 18 at?
- 19 A. I've not measured the flat, is sounds roughly the right
- dimension.
- 21 Q. I appreciate we're not dealing with exact measurements.
- 22 If we then go down three to figure 9, right?
- 23 A. Yes.
- 24 Q. All I want to do, is if you run across that to
- 25 100 per cent, what would be the distance that you would

- need to be from another building? I should say the
- 2 relevant boundary, I think that's the exact term.
- 3 A. I'm reading that as five metres.
- 4 O. Yes.
- 5 A. I've never done this under quite so much pressure to be
- 6 honest.
- 7 THE CORONER: Mr Martin, I feel for you. If you need time
- 8 with any questions, then you must say. Don't feel
- 9 pressured into answering until you're ready.
- 10 MR COMPTON: Do you see the point: it's so obviously within
- 11 the permitted percentage there, Lakanal House?
- 12 A. Yes, I mean, that's what I suggested in my statement.
- 13 Q. There can be no doubt about this, it's clear by a long,
- long way; do you accept that?
- 15 A. Yes, I was just reluctant to be absolute, bearing in
- 16 mind I haven't done that analysis, nor is it my job to
- 17 do so.
- 18 Q. No, I understand. The only other matter I wanted to
- just ask you about is the FENSA certification. It's
- a document at page 4024, and I wonder if we could just
- 21 put this document up. It's the penultimate paragraph
- 22 there. I think this is a meeting you had on
- 23 18 January 2011; is that right?
- 24 A. That's right. I never saw the record of that meeting
- 25 until fairly recently, but it looks like the kind of

- stuff I would have said, but I can't remember back that
- 2 far.
- 3 Q. I just want to ask you this -- I'm asked to clarify who
- 4 was at the meeting. Was Mr Kennett there, Mr Jenkins,
- 5 Mr Reeves and Damian Walsh; is that right? On
- 6 18 January 2011 at Eland House.
- 7 Can I just ask you to go to that penultimate
- 8 paragraph, where you were questioning FENSA's assertion
- 9 that the panels were not covered by the certificate, and
- 10 you were then suggesting that maybe someone else can
- offer guidance. I just want to ask you two questions
- 12 about this: firstly, does that remain your concern
- 13 today, as to whether or not the FENSA certification
- 14 actually did apply or not?
- 15 A. Well, having read that and my recollection of what
- I said, which obviously I can only apply that, is that
- 17 I wasn't certain that FENSA were correct and suggested
- that the people at the meeting spoke to a colleague of
- mine who deals with that aspect of the regulations.
- 20 Q. All right. You yourself had concerns as to whether
- there was compliance or not?
- 22 A. I didn't know, yes.
- 23 Q. All right, I'll leave it. I have no further questions?
- 24 THE CORONER: Thank you.
- 25 MR HENDY: Madam, just before Mr Compton finishes,

- 1 I detected there might have been an ambiguity on the
- 2 bases on which he put the questions about the
- 3 percentage, and that was about the external rectangle.
- 4 It may be that I've simply misunderstood the
- 5 proposition, but may I just explain it to you and hence
- 6 to Mr Compton and we can see whether there may be
- 7 another question to ask?
- 8 Madam, it's in tab 11 at page 13. Mr Compton was
- 9 asking about how one calculates the rectangle, and our
- 10 understanding of the way that the BRE tables and so
- 11 forth work is that when you're looking at the west face
- of that particular compartment, you actually have three
- 13 rectangles there, you have a rectangle of the external
- 14 face of the kitchen, a rectangle for the external face
- of bedroom 1, and a rectangle for the external face of
- bedroom 2, and it's the combination of those three
- 17 rectangles that give you the overall dimension, it's not
- 18 that you take into account what would be the external
- 19 face of the lounge of the opposing flat as well, which
- 20 I think is perhaps what Mr Compton --
- 21 THE CORONER: Well Martin, are you able to help Mr Hendy
- 22 with that?
- 23 A. Yes, the enclosing rectangle method is an attempt to
- simplify a hellishly complicated bit of physics which
- 25 I can't explain. Mr Crowder's probably better qualified

- 1 than me to do that.
- 2 The method says "Find one of these rectangles that
- 3 fits around the compartment that you are dealing with"
- 4 and it's done all the very difficult maths for you. So
- 5 there's an element of additional safety in there,
- 6 certainly in a odd shaped compartment like this.
- 7 THE CORONER: So would it be fair to summarise the position
- 8 that you haven't been asked to look at this before you
- 9 came today, you're being asked to deal with it on the
- 10 hoof, it's complex and there may be different ways of
- 11 looking at it and you are not in a position to say which
- 12 way you would look at it?
- 13 A. Absolutely, but I think the key message is it's
- 14 extremely unlikely that any of the external envelope of
- this building would have needed to be a protected area.
- 16 THE CORONER: I see, thank you.
- 17 MR COMPTON: Well, I'll leave it there, madam.
- 18 THE CORONER: All right. Thank you. Mr Leonard?
- 19 MR LEONARD: No, thank you.
- 20 THE CORONER: Ms Canby?
- 21 MS CANBY: No, thank you.
- 22 THE CORONER: Ms Petherbridge?
- 23 Questions by MS PETHERBRIDGE
- 24 MS PETHERBRIDGE: Just one matter, please. I hope this will
- 25 be a matter of clarification and not obscurity.

- 1 Mr Martin, could you just help us with Class 0. As
- 2 Mr Walsh said, there's been no dispute that Class 0 is
- a factor that would apply to Lakanal House, but it's
- 4 perhaps since been suggested that that might mean that
- 5 the facade would not ignite. We actually have
- 6 a definition of Class 0 at tab 22 in the jury bundle,
- 7 and I hope we won't get into the technicalities, but if
- 8 we could just look at it briefly. It's right, is it
- 9 not, as it says at the bottom there, that the definition
- is actually taken from Approved Document B; is that
- 11 something you recognise?
- 12 A. That's right, yes.
- 13 Q. I'm told I can't be heard even by somebody next to me,
- so that's not helpful.
- 15 THE CORONER: If you raise the height of your microphone
- 16 that might help. Do you have a book to stand it on or
- 17 something, several books?
- 18 MS PETHERBRIDGE: I don't have books, but I have papers; is
- 19 that better?
- 20 THE CORONER: That's better.
- 21 MS PETHERBRIDGE: Mr Martin, is it right in simple terms
- 22 that Class 0 would be a product where the surface is
- 23 either composed throughout of materials of limited
- 24 combustibility -- and we have, I think, that definition
- on page 3 -- so the jury have a definition of limited

- 1 combustibility, and I think you're happy with that
- definition, that it would be capable of burning, but not
- 3 liable to burn unless under an imposed heat source.
- 4 That's the definition the jury has on a page 3.
- 5 A. Yes.
- 6 Q. Then we have an alternative that perhaps is slightly
- 7 less clear of a Class 1 material which has a fire
- 8 propagation index, and then it gives you details of what
- 9 the fire propagation index should be.
- 10 So the jury has a general understanding, is this
- 11 right: that Class 1 relates to a British Standard about
- 12 surface spread of flame and how far the flame should
- spread within a given time, in general terms?
- 14 A. Yes.
- 15 Q. Fire propagation, is it right that that relates, and
- 16 I stand to be corrected, to the amount of fuel or energy
- 17 that the material would contribute to a fire if it
- 18 burned or something of that --
- 19 A. Yeah, that's a good way of describing it, it's the
- amount of energy released back into the fire.
- 21 Q. So Class O doesn't necessarily mean a surface that won't
- ignite, it means one that has limits as to the time and
- 23 the rate at which fire should spread; is that a fair
- 24 comment?
- 25 A. Yes, it's -- it will burn, just not very much.

- 1 Q. Okay, thank you.
- 2 THE CORONER: Ms McGahey?
- 3 MS MCGAHEY: No thank you, madam.
- 4 THE CORONER: Thank you.
- 5 Members of the jury, any questions?
- 6 Questions from THE JURY
- 7 THE FOREMAN OF THE JURY: Thank you, I do have a few but, as
- 8 some of the advocates also found, I may be veering into
- 9 Building Regulations so I'll take your guidance on if
- 10 I'm asking the right person.
- 11 THE CORONER: There's quite a fine line that we're trying to
- 12 draw here.
- 13 THE FOREMAN OF THE JURY: Regulations such as those that
- we've been looking at with the Approved Document, we've
- 15 heard that they're reviewed on a regular basis and
- indeed again this year. In your experience, is this
- 17 mainly due to changes to the law or because they confuse
- 18 people?
- 19 A. Certainly, the review we did in 2006, which was a major
- 20 review -- ones we've done more recently have been tweaks
- 21 for various technical reasons -- in 2006 we went to
- 22 quite a lot of effort to speak to regular users of the
- 23 Approved Document to find out which areas they had
- 24 a problem with, so we weren't just looking at technical
- issues, we were looking at problems people had with

- 1 certain parts of it. We took all of that on board, as
- far as we could, and amended those parts which were
- 3 creating the most problems.
- 4 My feeling is from -- we get less questions now than
- 5 we used to, so I feel that we've moved in the right
- 6 direction, insofar as what happened in 2006.
- 7 THE FOREMAN OF THE JURY: Thank you. I'm under the
- 8 impression that the 100 per cent unprotected regulation,
- 9 I think what plays a key part in that is how far the
- 10 building is from the other buildings?
- 11 A. That's right. It's possibly the oldest building
- 12 regulation we have, it stems back to the Great Fire of
- 13 London. It's got more sophisticated since then by
- 14 essentially to trying to stop that happening again.
- 15 THE FOREMAN OF THE JURY: Okay, it touches on -- with
- something that old. Are there Building Regulations
- 17 which prevent new buildings being put closer to old
- 18 buildings which would therefore turn the older
- 19 building --
- 20 THE CORONER: I think that's an extremely interesting
- 21 question, but I think it actually isn't one which is
- 22 relevant to the issues we need to deal with here and
- I think we have enough complex issues to deal with
- 24 without going down that route.
- 25 THE FOREMAN OF THE JURY: Okay, thank you.

- Okay, I think the other question I have is just one
- 2 that I'll pass you through rather than this gentlemen
- 3 here. Thank you very much.
- 4 THE CORONER: Well, if it's a question that Mr Martin can
- 5 answer, now is your chance, because he will go unless
- 6 once he is finished today unless there is a very good
- 7 reason to keep him or to ask him to come back.
- 8 THE FOREMAN OF THE JURY: Okay, well, I'll ask and you can
- 9 always tell me it's not. It's more a matter of opinion
- 10 as an expert witness.
- 11 THE CORONER: Well, that's already difficult because
- 12 Mr Martin isn't here as an expert witness, but try the
- question and we'll see where we go.
- 14 THE FOREMAN OF THE JURY: I was just hoping that in
- 15 Mr Martin's experience, if he could give us any idea,
- just a rough percentage, of how many buildings in
- 17 Greater London do fall into this category where they're
- 18 100 per cent unprotected.
- 19 THE CORONER: Well, again, I think that that's not an issue
- 20 that we need to look at specifically in relation to
- 21 these Inquests. Again an interesting question, but
- I think it's one that we don't need to pursue, so
- I think we won't pursue that one.
- 24 THE FOREMAN OF THE JURY: Thank you, I was just thinking of
- recommendations later. Thank you very much.

- 1 THE CORONER: Thank you.
- 2 Questions from THE CORONER
- 3 THE CORONER: Mr Martin, thank you very much for coming.
- 4 Perhaps I could just raise a couple of issues with you.
- 5 We have a large population in this country, and we have
- 6 a very large housing stock and a great deal of that
- 7 housing stock is going to be really quite elderly, isn't
- 8 it?
- 9 A. Yes.
- 10 THE CORONER: So having buildings of the type that we see
- 11 with Lakanal House is not that unusual, is it?
- 12 A. That specific design is relatively unusual.
- 13 THE CORONER: Well, not that specific design. I mean
- 14 buildings of that sort of age.
- 15 A. Yes, quite a lot.
- 16 THE CORONER: Across the country?
- 17 A. Yes.
- 18 THE CORONER: Given that anyone who owns such a building,
- 19 when work is needed, will maybe say to itself "Do
- I demolish and rebuild or do I carry out
- 21 refurbishments?" the likelihood is they'll say "We'll
- 22 carry out some refurbishment, we'll carry out some
- 23 updating work?
- 24 A. That's a matter of judgment they'd make on the relative
- 25 merits.

- 1 THE CORONER: Well, of course it is, but that's the way that
- building owners, especially looking at social housing,
- 3 that's more likely to happen. That's my premise anyway,
- 4 you don't have to agree with that, but I would assume
- 5 that's more likely to happen, in which case anyone who's
- 6 looking -- and my premise is there are likely to be
- 7 large numbers of people who are looking at the practical
- 8 difficulties associated with upgrading buildings of this
- 9 sort, rather than looking at newbuild, that's going to
- 10 be a very substantial part of the work of the building
- industry across the country.
- 12 A. Yes.
- 13 THE CORONER: Yes. So a guidance document really has to
- 14 take into account, has it not, the ordinary building
- folk who are going to have to use, or who are invited to
- 16 use, the document, in order to assist them with
- 17 questions of this sort?
- 18 A. I understand what you're suggesting. We did endeavour
- 19 to help a little in that respect in the 2006 edition of
- 20 the Approved Document. Mostly that was focussing on the
- 21 simpler types of buildings where you might not
- 22 necessarily expect a professional to be involved.
- 23 THE CORONER: Well, you're going to have medium and smallish
- 24 contractors and suppliers involved with all sorts of
- buildings, aren't you, and ordinary building folk need

- 1 to know where they can go to get a straightforward
- answer to the sorts of questions which we've been
- 3 debating this morning?
- 4 A. I understand what you're suggesting.
- 5 THE CORONER: It's just it seems to me that if you need
- 6 a specialist engineer to take you through a document in
- order to get straightforward answers to fairly basic,
- 8 straightforward questions, then the guidance document
- 9 isn't really doing what it says on the tin, is it?
- 10 A. I think that may be a little unfair. What you tend to
- 11 find is that different contractors and different
- 12 manufacturers, and other people involved in the process,
- 13 learn the bit of the Building Regulations that affect
- the kind of thing they do.
- So in practice a lot of them will probably never
- directly refer to the Approved Document. That's one of
- 17 the benefits of schemes like the FENSA scheme, for
- instance, where common work is replacement of windows,
- 19 and rather than the members of that scheme clawing their
- 20 way through the building regulation, they'll use the
- 21 guidance that they're given by the scheme provider,
- 22 which is explaining how to apply the Building
- 23 Regulations to the kind of work they do.
- So my experience is it's not as big a problem as it
- appears, but I do recognise that the Approved Document

- 1 could always be easier to read. The challenge with
- 2 a document like this is it could well end up being
- a library full of paper if you tried to cover every
- 4 eventuality. So it's a balance between those two
- 5 things.
- 6 THE CORONER: I see. You said that you're looking at
- 7 applying some plain English principles to the document.
- 8 A. Yes.
- 9 THE CORONER: Even doing that, that's not going to help
- 10 someone who is taken through the document, as you've
- 11 taken us, then suddenly to find that you, in fact, go
- 12 outside the document to one of two other documents in
- 13 order to find the answer to what surely is a fairly
- 14 straightforward question.
- 15 A. I'm not convinced it is a straightforward question.
- 16 Q. Is it not straightforward for a building owner or
- 17 a contractor who has been asked to undertake some work
- 18 to say "Well, I've been asked to make some changes to
- 19 the external faces of this particular block of flats
- 20 [whatever it is], does it have to be fire-resistant or
- 21 doesn't it?" Isn't that a straightforward question?
- 22 A. The question's straightforward. If you're experienced
- 23 with applying the Building Regulations it's not
- 24 a difficult question, but I appreciate if you read it
- 25 for the first time it will be quite a difficult subject

- 1 to get into.
- 2 THE CORONER: Well, I think the exercise that we've seen in
- 3 these courts indicates that it isn't a straightforward
- 4 exercise. In fact, it's quite byzantine, isn't it?
- 5 A. I'm probably not the right person to ask, I've worked
- 6 with it for a long period of time, which to me is why it
- 7 seems very straightforward, which is why we went through
- 8 the process I've described in the lead up to the 2006
- 9 changes, to ask people who do use it what they think,
- and the feedback I get is that people don't have
- 11 a problem with it.
- 12 THE CORONER: I just query whether applying plain English
- principles or having one column on a page rather than
- 14 two columns on a page will actually resolve the sort of
- difficulty that we've been seeing in this court.
- 16 A. The exercise that we -- the document we've most recently
- 17 applied this to is the document dealing with the design
- of stairs, and we restructured the guidance as well to
- 19 make it easier to follow. But it's difficult, fire
- 20 protection in buildings is a complicated subject, and
- 21 I don't think you can stop that being the case.
- 22 THE CORONER: But it's such an important subject that it's
- one that ought to be accessible to the people who have
- 24 to use this document.
- 25 A. My experience is that it is.

- 1 THE CORONER: Very well.
- 2 Thank you very much for coming, Mr Martin, thank you
- 3 very much for your help. I would say you're welcome to
- 4 stay, but in fact we've finished the evidence for today,
- 5 so you're free to go. Thank you.
- 6 (The witness withdrew)
- 7 THE CORONER: Yes, I think that's all we're dealing with by
- 8 way of evidence today; is that right, Mr Maxwell-Scott?
- 9 MR MAXWELL-SCOTT: Yes, that's right, madam.
- 10 THE CORONER: Thank you.
- 11 So, members of the jury, we have two more days of
- 12 evidence. So tomorrow we are asking Mr Dobson, who is
- 13 the London Fire Commissioner, to come to give evidence,
- 14 and then on Friday we shall have the chief fire rescue
- adviser, and he will be coming to give evidence on
- 16 Friday. So, please, could you be back here for
- a 10 o'clock start tomorrow morning.
- 18 MR MAXWELL-SCOTT: Madam, just before the jury go, I think
- it's actually going to be the other way round.
- 20 THE CORONER: I'm sorry, I do apologise and I apologise to
- 21 the gentlemen concerned.
- 22 MR MAXWELL-SCOTT: The Chief Fire and Rescue Adviser
- 23 tomorrow and Mr Dobson, the Commissioner of the
- 24 London Fire Brigade on Friday.
- 25 THE CORONER: Yes, Mr Maxwell-Scott, you had told me that,

- 1 so I apologise, I had that the wrong way round.
- 2 10 o'clock tomorrow morning, thank you.
- 3 (In the absence of the Jury)
- 4 THE CORONER: Thank you. Are there any issues to raise
- 5 before tomorrow?
- 6 MR MAXWELL-SCOTT: Just to say that my understanding is that
- 7 we should receive a statement from Mr Holland very
- 8 shortly, but I'm told by Mr Atkins that hasn't arrived
- 9 yet. As soon as it comes in we will circulate it.
- 10 THE CORONER: Thank you very much, that's helpful. Any
- other issues then? Yes, Ms McGahey?
- 12 MS MCGAHEY: Just one please, madam. I understand that my
- 13 learned friends are going to consider Mr Hendy's
- 14 submission in relation to section 20 of the 1939 Act and
- 15 we've been asked whether Mr Martin could contribute to
- a response from the department. We are more than
- 17 willing to do that. We also understand though that it
- is possible that Mr Martin might have to be recalled
- depending on the view that everybody takes of Mr Hendy's
- 20 submissions after that consideration. In these
- 21 circumstances --
- 22 THE CORONER: So you have a practical problem.
- 23 MS MCGAHEY: May I ask permission to speak to Mr Martin?
- 24 THE CORONER: Yes, of course, provided you speak to the
- 25 matters that you would need to talk to him about, and

1	I'm sure you will, thank you.					
2	MS MCGAHEY: I'm grateful madam, thank you.					
3	THE CORONER: Yes, Mr Hendy, just coming back to that point,					
4	can you give us an idea of your timing on that?					
5	MR HENDY: We're rather in the hands of others for the					
6	supply of materials which we've been told about.					
7	There's a narrative of waivers but not the waivers					
8	themselves oh we have those, have we? We have them					
9	now. Mr Edwards is going to get to work this afternoon,					
10	so as soon as we can do it we'll circulate it.					
11	THE CORONER: Okay. That's very helpful. All right, thank					
12	you very much. Thank you.					
13	(1.08 pm)					
14	(The Court adjourned until 10 o'clock the following day)					
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